200200015

### THE UNHERD SHATES OF AMERICA

TO MIL TO WHOM THESE PRESENTS SHAM COME:

Brushbale Seeds, Inc.

DECEMB, THERE HAS BEEN PRESENTED TO THE

#### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITIORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN GODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY THEREFROM.

SOYBEAN

'BS-141'

In Testimonn Marrest, I have hereunto set my hand and caused the seal of the Mant Anriety Protection Office to be affixed at the City of Washington, D.C. this ninth day of April, in the year two thousand two.

G. O. M. Jube

Commissioner Plant Variety Protection Office Agricultural Marketing Service

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

Application is required in order to determine if a plant variety protection certificate is to be issued
(7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

(instructions and information colle	cuon buraen statem	ent on reverse)				
1. NAME OF OWNER BRUSHVALE SEEDS, INC	•			2. TEMPORARY DESIGNAT EXPERIMENTAL NAME	ION OR	BS-747 NAME
4. ADDRESS (Street and No., or R.F.D. No., Street and No.: RRI BOX 16A City: BRECKENRIDGE, MN	City, State, and ZIP Code	, and Country)		5. TELEPHONE (include area 2/8-643-	· ·	FOR OFFICIAL USE ONLY
Zip: 56520 Country: USA				6. FAX (include area code) 21B-643-8	7110	FILING DATE
7. IF THE OWNER NAMED IS NOT A "PERS ORGANIZATION (corporation, partnership CORPORY TIO	, association, etc.)		PORATED, GIVE FINCORPORATION	9. DATE OF INCORPORATION 12 - 20 - 19		10/30/2001
10. NAME AND ADDRESS OF OWNER REP Dr. Richard C. Peet FOLEY & LARDNER Washington Harbour 3000 K Street, N.W., Suite	RESENTATIVE(S) TO SE	RVE IN THIS APPLICATION	N. (First person listed will re	receive all papers)		FILING AND EXAMINATION FEES: \$ 2,705.00  RELECTION OF THE PROPERTY OF THE PROP
Washington, D.C. 20007-5	109					s 320 CERTIFICATION FEE:
11. TELEPHONE (Include area code) (202) 672 5483	12. FAX (Include area of (202) 672 5399		e-mail eet@foleylaw.c	com .^	14. CROP K	IND (Common Name) AN
18. CHECK APPROPRIATE BOX FOR EACH reverse a. Exhibit A. Origin and Breeding		ED (Fallow instructions on	CERTIFIED	OWNER SPECIFY THAT SEED C SEED? See Section 83(a) of S (if "yes", answer items 20	the Plant Varie	
<ul> <li>b. Exhibit B. Statement of Distinct</li> <li>c. Exhibit C. Objective Description</li> <li>d. Exhibit D. Additional Description</li> <li>e. Exhibit E. Statement of the Bas</li> <li>f. Voucher Sample (2,500 viable to</li> </ul>	n of Variety  n of the Variety <i>(Optional)</i> is of the Owner's Ownersh		20. DOES THE O VARIETY BE IF YES, WHIC	and 21 below)  WNER SPECIFY THAT SEED C LIMITED AS TO NUMBER OF C CH CLASSES?  FOUNDA	CLASSES?	YES NO
verification that tissue culture we repository)  g. Filing and Examination Fee (\$2, States" (Mail to the Plant Variety	ill be depositied and maintal 705), made payable to "Tr	ained in an approved public	IF YES, SPEC NUMBER 1, 2	, 3, etc. FOUNDATI	S?	YES NO NO CERTIFIED
22. HAS THE VARIETY (INCLUDING ANY HAFROM THIS VARIETY BEEN SOLD, DISPOTHER COUNTRIES?  YES  IF YES, YOU MUST PROVIDE THE DATE FOR EACH COUNTRY AND THE CIRCUIT	OSED OF, TRANSFERRE  NO  OF FIRST SALE, DISPO	D, OR USED IN THE U.S. SITION, TRANSFER, OR U	OR 23. IS THE VARIE OR PROPERTY F  VES  IF YES, GIVE REFERENCE	RIGHT (PLANT BREEDER'S RIG	THE VARIETY SHT OR PATE NO R ISSUANCE	PROTECTED BY INTELLECTUAL NT)?  AND ASSIGNED
24. The owners declare that a viable sample of for a tuber propagated variety a tissue cult. The undersigned owner(s) is(are) the owner and is entitled to protection under the provious owner(s) is(are) informed that false repres.	ure will be deposited in 'a per of this sexually reproduc sions of Section 42 of the f	oublic repository and mainta ed or tuber propagated plat Plant Variety Protection Act	nined for the duration of the nt variety, and believe(s) th	certificate.		
SIGNATURE OF OWNER Brushvale Seed	Le Jon	miller	SIGNATURE OF (	OWNER		
NAME (Please print or type) Ton Miller			NAME (Please pri	nt or type)		
Secretary		9-19-01	CAPACITY OR TI			DATE
T-470 (9-00) designed by the Plant Variety Pro	tection Office with WordPe	rfect 6.0a. Replaces STD-	470 (6-98) which is obsole	te. (See reverse for instru	ctions and info	ormation collection burden statement)

### Exhibit A. Origin and Breeding History of the Variety

Soybean Variety BS-141

Variety BS-141 was bred from a 1992 cross of FTE-MN001/FTE-KN6001/IL3333NT.

Variety BS-141 is an F6-derived variety which was advanced to the F6 generation by modified single seed descent. The first increase involved F6 single plant purification. The second increase involved 32 foot row increase. The third increase involved 1 acre increase.

Subsequently, BS-141 has undergone years of extensive testing and purification and has been observed by the breeder to be uniform and stable for all plant traits from generation to generation, with no evidence of variants. Single plants selected from an F6 population have over 96% of variety fixed genes. At all stages of increase, varieties were visually inspected based on phenotypic criteria including, pubescence color, flower color, pod color, and plant type.

# STATEMENT OF DISTINCTNESS SOYBEAN VARIETY - B.S.141

B.S. 141 is most similar to Danatto soybeans. However, B.S. 141 has a 5-7 day longer maturity and yields 3-5 bushel better than Danatto. B.S. 141 also is a stronger plant and does not lodge as Danatto does. B.S. 141 has a stronger seed coat and handles Iron Chlorosis better. The seed size of B.S. 141 is uniform.

Form Approved - OMB No. 0581-0055

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0381-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require afternative means for communication of program information (Braille , large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705 EXHIBIT C (Soybean)

## OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max (L.) Merr.)

NAME OF API	LICANT(S) ALE Seeds, inc.								FOR OFFICIAL USE ONLY
	eet and No. or R.F.D. No.	City, Si	ate, and	ZIP Code)					PVPO NUMBER
Rri Box 1			•	ŕ					2002 <i>00015</i>
BRECKE	NRIDGE, MN	5652	0						VARIETY NAME
	,								BS-141
									TEMPORARY OR EXPERIMENTAL
•									DESIGNATION
PLEASE RI	EAD ALL INSTRU	CTIO	NS CA	REFUL	LY: Plac	e the a	ppropriate number	r that describes the va	rietal character of this variety in the boxes
Place a zero	in the first box (e.g	1					) when numl	har is aithar 90 ar less	an 0 an loss respectively. Data for
quantitative		9	9	9	0	9	) waca aaaa	ber is either 33 or less	or 9 or less respectively. Data for
			,	-	1 - 1				
plant charac	ters should be base	<del>u on a</del>	munu	ium or 1	00 prants	. Coi	nparative data sho	uld be determined from	m varieties entered in the same trial. Royal
Horticultura	l Society or any rec	ognize	ed colo	r standa	rd may b	oe used	l to determine plan	t colors; designate sys	tem used:
A. MORP	er all questions for y	your v	ariety;	IACK OT	response	may o	eray progress of yo	our application.	
A. MORP	nologi								
Seed Shape			,						
1	1 = Spherical (L/W, L/T, and	ı <b>d T</b> /	W ra	tios <	1.2)			cal-Flattened > 1.2; L/T ratio	< 1.2)
	3 = Elongate (L/T ratio > 1	l <b>.2</b> ; 7	:/ <b>W</b> r	atio <	1.2)		4 = Elongat (L/T ratio >	te-Flattened > 1.2;T/W ratio >	> 1.2)
Seed Coat (	Color:		ē						
1	1 = Yellow		2 =	Greer	1	3	= Brown	4 = Black	5 = Other (Please Specify)
Seed Coat I	Luster:								
2	1 = Dull		2 =	Shiny					
Séed Size:							•		
0 9	grams/100	seed	S						
Hilum Colo	r:						•		
2	1 = Buff 6 = Black			Yellov Other	v (Please		= Brown cify)	4 = Gray	5 = Imperfect Black

		ė
Α.	MORPHOLOGY (	(Continued)

**Cotyledon Color:** 

$$\boxed{1} \quad 1 = \text{Yellow} \qquad 2 = \text{Green}$$

Seed Protein Peroxidase Activity:

$$1 = Low 2 = High$$

Hypocotyl Color:

Leaf Shape:

Flower Color:

$$1$$
 1 = White 2 = Purple 3 = White with a Purple Throat

**Pod Color:** 

$$\boxed{2} \quad 1 = \text{Tan} \qquad \qquad 2 = \text{Brown} \qquad 3 = \text{Black}$$

**Pubescence Color:** 

Plant Habit:

$$3$$
 1 = Determinate  $2$  = Semi - Determinate  $3$  = Indeterminate  $4$  = Intermediate

Maturity Group:

Maturity Subgroup:

B. DISEASE REACTIONS 
$$0 = \text{Not Tested}$$
  $1 = \text{Susceptible}$   $2 = \text{Resistant}$   $3 = \text{Tolerant}$ 

Bacterial

- Bacterial Pustule (Xanthomonas campestris pv. glycines (Nakano) Dye)
- Bacterial Blight (Pseudomonas syringae pv. glycinea (Coerper) Young, Dye, & Wilkie)
- Wildfire Blight (Pseudomonas syringae pv. tabaci (Wolf & Foster) Young, Dye, & Wilkie)

В. І	DISEASE REAC	CTIONS (Conti	nued) (	0 = Not Tested	1 = 8	Susceptible	2 = R	Resistant	3 = Tolerant
Fung	ai								
0	Brown Spot	(Septoria glycir	es Hemmi)	•					
	Frogeye Lea	f Spot (Cercosp	ora sojina	Hara)		•			
0	race 1		0 1	race 2	0	race 3		0 ra	ce 4
0	race 5		0 r	race 6	0	Other	(Please	Specify) _	
0	Target Spot	(Corynespora c	assiicola (B	erk. & Curt.) W	ei)				
0	Downey Mile	dew ( <i>Peronospo</i>	ra trifoliori	um var. manchu	<i>rica (</i> Nau	m.) Syd. ex G	äum)		,
0	Powdery Mil	ldew ( <i>Microsph</i>	aera diffuso	ı Cke. & Pk.)	•				
3	Brown Stem	Rot ( <i>Phialopho</i>	ra gregata	(Allington & Cha	amberlair	ı) W. Gams.)			·
0	Stem Canker	(Diaporthe pho	aseolorum (	(Cke. & Ell.) Sac	c. var. <i>ca</i>	ulivora Athov	w & Cal	ldwell)	
0	Pod and Sten	n Blight ( <i>Diapo</i>	rthe phased	olorum (Cke. & F	Ell.) Sacc.	var. <i>sojae</i> (L	ehman)	Wehm.)	
3	Purple Seed 8	Stain ( <i>Cercospo</i>	ra kikuchii	(T. Matsu. & To	omoyasu)	Gardener)		-	
3	Rhizoctonia I	Root Rot (Rhize	octonia sola	ni Kühn)					
Phytop	ohthora Root R	ot ( <i>Phytophtho</i> i	ra megaspei	rma Drechs. f. sp	. glycined	7 (Kuan & Er	win))		·
0	race 1	o race 8	0	race 15	0 rac	ce 22			
0	race 2	0 race 9	0	race 16	0 rae	ce 23 race	e 3		race 10
0	race 5	o race 12	0	race 19	0 rae	ce 26			and the second
0	race 6	o race 13	0	race 20	0 Ot	her ( <i>Please Sp</i>	pecify)		
0	race 7	0 race 14	0	race 21	0 -				
0		0	0		0				
0	Bud Blight (T	0 boacco Ringspo	ot Virus)						•
0	Yellow Mosaid	c (Bean Yellow	Mosaic Vi	rus)					

ห. ก	ISEASE REACTIONS (Continued)	0 = Not Te	sted $1 = Susception$	otible $2 = Resistant$	3 = Tolerant
0	Cowpea Mosaic (Cowpea Chloroti	c Virus)			
0	Pod Mottle (Bean Pod Mottle Viru	s)			4.
0	Seed Mottle (Soybean Mosaic Viru	s)			
Nema	tode				
Soybe	an Cyst Nematode (Heterodera glycin	es Ichinohe)			
1	race 1 1 race 4	1	race 9		
1	race 2 1 race 5	1	race 14		
1	race 3 1 race 6	1	Other (Please Specij	fy)	
0	Lance Nematode (Hoplolaimus colu	umbus Sher)			
0	Southern Root Knot Nematode (Me	eloidogyne inco	gnita (Kofoid & Wh	ite) Chitwood)	
0	Northern Root Knot Nematode (Mo	eloidogyne hapl	a Chitwood)		
0	Peanut Root Knot Nematode (Melo	idogyne arenari	a (Neal) Chitwood)		
0	Reniform Nematode (Rotylenchus r	eniformus Linw	ood & Olivera)		
0	Javanese Nematode (Meloidogyne jo	<i>vanica</i> (Treub)	Chitwood)		
0	Other Nematode (Please Specify)				
C. PH	YSIOLOGICAL RESPONSES	0 = Not Test	ed 1 = Suscept	ible 2 = Resistant	3 = Tolerant
4	Iron Chlorosis on Calcareous Soil	4	s = Susceptible with	better tolerance than	current natto varieties
0	Phosphorus	0	Other ( <i>Please Specif</i>	ý)	
0	Boron				
0	Aluminum				
4	Salt				
0					

Drought

None available at this time.

D. INCICCE DE ACTIVONO				
D. INSECT REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant	3 = Tolerant
Mexican Bean Beetle (Epilachna)	varivestis Mulsant)			
O Potato Leaf Hopper (Empoasca for	abae (Harris))			
Other (Please Specify)				
E. HERBICIDE REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant	
0 Metribuzin				
0 Bentazone				
0 Sulfonylurea				
0 Glyphosate				
0 Glufosinate				
0 Pendimethalin				
Other (Please Specify)		· · · · · · · · · · · · · · · · · · ·		
F. TRANSGENIC COMPOSITION				
Has the development of the subject variety or, the removal of genetic material from th If yes, please complete the following inform	ne application variety?	•		other than a soybean,
1. Please state the vector's name:				
2. Please state the vector components:				
3. Please describe the genetic material suc	ccessfully transferred	into the subject varie	ty:	
4. Please describe the insertion protocol:				
* A literature citation(s) explaining the for the "Transgenic Composition" portion	our information reque of this form.	ests above may be an	acceptable altern	ative to completion of
G. BIOCHEMICAL MARKERS			· · · · · · · · · · · · · · · · · · ·	
Please describe any biochemical information (e.g. Simple Sequence Repeats, Restriction pages if necessary	n here, which you bel Fragment Length Pol	ieve will be helpful in ymorphisms, Isozymi	further describin c Characterizatio	ng the subject variety n). Use additional

H. COMMENTS

REPRODUCE LOCALLY. Include form number and edition date on a U.S. DEPARTMENT OF AGRICULTURE		APPROVED - OMB No. 0581-0055			
AGRICULTURAL MARKETING SERVICE	The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paper Reduction Act (PRA) of 1995.				
EXHIBIT E	Application is required in order to det	ermine if a plant variety protection			
STATEMENT OF THE BASIS OF	certificate is to be issued (7 U.S.C. 2	421). The information is held			
OWNERSHIP	confidential until the certificate is issu	ied (7 U.S.C. 2426).			
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME			
BRUSHVALE SEEDS, INC.	EXP - 141	BS-141			
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)			
Rri Box 16a Breckenridge, MN 56520	218-643-2311	218-643-8110			
	7. PVPO NUMBËR				
8. Does the applicant own all rights to the variety? Mark an "X" in the If no, please explain.	l ne appropriate block.	X YES NO			
9. Is the applicant (individual or company) a U.S. National or a U.S.  If no, give name of country	based company?	X YES NO			
10. Is the applicant the original owner?	If no, please answer one of the fol	lowing:			
a. If the original rights to variety were owned by individual(s), is					
[]		ai(s)?			
YES NO If no, give name of count	try ,				
b. If the original rights to variety were owned by a company(ies	), is (are) the original owner(s) a U.S. ba	sed company?			
YES NO If no, give name of count	try				
11. Additional explanation on ownership (If needed, use the reverse	for extra snace):				
	ver områ opåsor.	•			
Please Note:					
Plant variety protection can only be afforded to the owners (not licen	sees) who meet the following criteria:				
<ol> <li>If the rights to the variety are owned by the original breeder, that p national of a country which affords similar protection to nationals of</li> </ol>	person must be a U.S. national, national of the U.S. for the same genus and speci	of a UPOV member country, or ies.			
<ol><li>If the rights to the variety are owned by the company which emplo nationals of a UPOV member country, or owned by nationals of a genus and species.</li></ol>	oyed the original breeder(s), the company country which affords similar protection	y must be U.S. based, owned by to nationals of the U.S. for the same			
s. If the applicant is an owner who is not the original owner, both the	original owner and the applicant must m	neet one of the above criteria.			
The original breeder/owner may be the individual or company who d					
ct for definitions.					
ct for definitions.  ccording to the Paperwork Reduction Act of 1995, no persons are required to respond to a risk information collection is 0581-0055. The time required to complete this information.	collection is estimated to average 6 minutes per respons	anse including the time for reviewing the			
act for definitions.  ccording to the Paperwork Reduction Act of 1995, no persons are required to respond to a printing information collection is 0581-0055. The time required to complete this information istructions, searching existing data sources, gathering and maintaining the data needed, a the U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the tatus. (Not all prohibited bases apply to all programs). Persons with disabilities who require	collection is estimated to average 6 minutes per respond completing and reviewing the collection of informations of race color national origin, say, religion, age.	onse, including the time for reviewing the tion.			
Act for definitions.  According to the Paperwork Reduction Act of 1995, no persons are required to respond to a prictible information collection is 0581-0055. The time required to complete this information istructions, searching existing data sources, gathering and maintaining the data needed, at the U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the tatus. (Not all prohibited bases apply to all programs). Persons with disabilities who require ontact the USDA's TARGET Center at 202-720-2600 (voice and TDD).  To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Wash poportunity employer.  D-470-E (07-97) (Destroy previous editions). Electronic version destants.	collection is estimated to average 6 minutes per respond completing and reviewing the collection of informat basis of race, color, national origin, sex, religion, age, e alternative means for communication of program information, D.C. 20250, or call 1-800-245-6340 (voice) or	onse, including the time for reviewing the tion.  disability, political beliefs, and marital or familial formation (braille, large print, audiotape, etc.) should  (202) 720-1127 (TDD). USDA is an equal			